Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of info unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known		
				Application Number	10/702,676	
	DRMATION D			Filing Date	11603	
STA	TEMENT BY	APF	PLICANT	First Named Inventor	Yi Lu	
				Group Art Unit	1635	
	(use as many s	heets	as necessary)	Examiner Name		
Sheet	1	of	3	Attorney Docket Number	09800240-0078	

U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (d known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
T	1	US-5,807,987 718	09-15-1998	Joyce et al.			
1	2	US-5,580,967	12-03-1996	Joyce			
V	3	US-5,459,040	10-17-1995	Hammock et al.			

FOREIGN PATENT DOCUMENTS							
Examiner Ci	Cite No.1	Foreign Patent Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	<b>T6</b>	
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document			
Τν	4	WO 00/26226	05-11-2000	Yale University			
1	5	GB 2,339,280	01-19-2000	RiboTargets Limited			
	6	WO 99/47704	09-23-1999	Jenne et al.			
	7	WO 98/49346	11-05-1998	The Scripps Research Institute			
	8	WO 98/27104	06-25-1998	Yale University			
	9	WO 96/17086	06-06-1996	The Scripps Research Institute			
<b>~</b>	10	EP 121970	10-17-1984	Daisy Systems Holland B.V.			

Examiner Signature	Draw	OVilamora	Date Considered	1/19/05
				<del></del>

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unque citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁴ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file ( and by the USPTO to

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file ( and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Please type a plus sign (+) inside this box TM +

PTO/SB/08B (08-00) Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of info unless it contains a valid OMB control no.

Substitute for form 1449B/PTO					Complete if Known			
				Application Number	10/702,676			
INFORMATION DISCLOSURE					Filing Date	11/6/03		
STATEMENT BY APPLICANT				PLICANT	First Named Inventor	Yi Lu		
İ					Group Art Unit	1635		
	(	use as many	sheel	s as necessary)	Examiner Name	7000		
Sheet 2 of 3					Attorney Docket No.	09800240-0078		
		0	THEF	RITEMS - NON PAT	ENT LITERATURE DOCUME	NTS		
Examiner Initials*	Cite No.	Include item (be	name ook, m	agazine, journal, serial, sy	L LETTERS), title of the article (whe mposium, catalog, etc.), date, page(s) ty and/or country where published.	n appropriate), title of the , volume-issue number(s),	T <sup>2</sup>	
TV	11			earch Report dated mber PCT/US01/20	January 15, 2003, for corre	esponding PCT		
1	12		R et	al., "A DNA Enzyn	ne that Cleaves RNA," Che	em. & Biol., 1994, pp.		
	13				997, pp. 3145-3150, Vol. 3	36.		
	14				erization and Divalent Meta			
1 )		1			hich Cleave DNA/RNA C			
	1.5				997, pp. 188-202, Vol. 269		·	
$\downarrow$	15	DEO et al., "A Selective, Ratiometric Flourescent Sensor for Pb <sup>2+</sup> ," J. Am. Chem. Soc., 2000, pp. 174-175, Vol. 122.						
	16 DOUDNA et al., The Chemical Repertoire of Natural Ribozymes," pp. 222-228,							
	17			"Lanthanide Probe	s for a Phosphodiester-Clea	ving Lead-Dependent		
TV	-				pp. 483-489, Vol. 275.	g,,		
	18	GEYER et al., "Evidence for the Metal-Cofactor Independence of an RNA Phosphodiester-Cleaving DNA Enzyme," Chem. & Biol., 1997, pp. 579-593, Vol. 4.						
	19	HOOGSTRATEN et al., J. Mol. Biol., 1998, pp. 337-350, Vol. 284.						
	20	HOOGSTRATEN et al., J. Am. Chem. Soc., 2002, pp. 834-842, Vol. 124.						
	21	KATAHIRA et al., European J. Biochem., 1998, pp. 727-733, Vo. 255.						
	22	KHAN et al., Nucl. Acid. Res., 1996, pp. 3568-3575, Vol. 24.						
	23	KIM et al., J. Biochem., 1997, pp. 1062-1067, Vol. 122.						
	24	KOZUMI et al., Allosteric Selection of Ribozymes That Respond to the Second Messengers cGMP and cAMP," Nature Struct. Biol., 1999, pp. 1062-1071, Vol. 6.						
	25				998, pp. 325-335, Vol. 284.			
	26	<del></del>		al., RNA, 1998, pp.				
	27	Dependen Vol. 28.	t RN	A-Cleaving Deoxy	naracterization of a Highly ribozyme," Nucl. Acid. Res	s., 2000, pp. 481-488,		
4	28	LIU et al., "A Fiber-Optic Evanescent Wave DNA Biosensor Based on Novel Molecular Beacons," Anal. Chem., pp. 5054-5059, Vol. 71.						

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Windows 22

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Complete if Known Substitute for form 1449B/PTO **Application Number** INFORMATION DISCLOSURE Filing Date STATEMENT BY APPLICANT Yi Lu First Named Inventor **Group Art Unit** (use as many sheets as necessary) **Examiner Name** Sheet of 3 09800240-0078 Attorney Docket No. OTHER ITEMS - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Cite T<sup>2</sup> Examiner item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), Initials\* No.1 publisher, city and/or country where published. 29 MECKLENBURG et al., Anal. Chimica Acta, 1997, pp. 79-86, Vol. 347. MULLAH et al., Tetrahedron Lett., 1997, pp. 5751-5754, Vol. 38. 30 31 NAZARENKO et al., Nucl. Acid. Res., 1997, pp. 2516-2521, Vol. 25. 32 OMICHI et al., "Effect of Substrate RNA Sequence on the Cleavage Reaction by a Short Ribozyme," Nucl. Acid Res., 1998, pp. 5655-5661, Vol. 26 OMICHI et al., Biochem., 1997, pp. 3514-3521, Vol. 36. 33 OTA et al., "Effects of Helical Structures Formed by the Binding Arms of DNAzymes and Their Substrates on Catalytic Activity," Nucl. Acid. Res., 1998, pp. 3385-3391, Vol. 26. POTYRAILO et al., "Adapting Selected Nucleic Acid Ligands (Aptamers) to Biosensors," Anal. Chem., 1998, pp. 3419-3425, Vol. 70. SABANAYAGAM et al., "Oligonucleotide Immobilization on Micropatterned 36 Streptavidin Surfaces," Nucl. Acid. Res., 2000, Vol. 28, 4 pages. SANTORO et al., "Mechanism and Utility of an RNA-Cleaving DNA Enzyme," Biochem., 1998, pp. 13330-13342, Vol. 37. SANTORO et al., "A General Purpose RNA-Cleaving DNA Enzyme," Proc. Natl. 38 Acad. Sci. USA, 1997, pp. 4262-4266, Vol. 94. 39 SCOTT, Current Opinion in Structural Biology, 1998, pp. 337-350, Vol. 8. STOJANOVIC et al., "Aptamer-Based Folding Fluorescent Sensor for Cocaine," J. Am. Chem. Soc., 2001, pp. 4928-4931, Vol. 122. STOJANOVIC et al., "Fluorescence Sensors Based on Aptamer Self-Assembly," J. Am. Chem. Soc., 2000, pp. 11547-11548, Vol. 123. 42 STREICHER et al., Nucl. Acid. Res., 1993, pp. 311-317, Vol. 21. 43 SUGIMOTO et al., FEBS Lett., 1996, pp. 96-100, Vol. 393. WALTER et al., "Folding of the Four-Way Junction of the Hairpin Ribozyme," Biochem., 1998, pp. 17629-17636, Vol. 37. WEDEKIND et al., Nature Structural Biology, 1999, pp. 261-268, Vol. 6. 45 46 WILLIAMS et al., EMBO J., pp. 4551-4557, Vol. 14.

Examiner Signature	Maay	Milemore	Date Considered	1/19/05	)
	-				